

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (currently amended) An overlay routing processor for transferring information over a computer network, wherein the computer network has a native routing protocol, the overlay routing processor comprising:

instructions for associating computers on the computer network with a given overlay group;

instructions for determining whether received information is associated with the given overlay group; and

instructions for determining, for each computer associated with the overlay group, whether the computer is to be transferred the information using multicasts or unicasting based on a request from the computer indicating a transport preference;

instructions for routing the received information to the computers associated with the given overlay group having requested a multicast connection using the native routing protocol to provide the information by multicasting, wherein at least some of the received information is routed using unicast packets; and

instructions for routing the received information to the computers having requested a unicast connection using the native routing protocol to provide the information by unicasting.

2. - 9. (canceled)

10. (original) The overlay routing processor of claim 1, further comprising instructions for handling administrative scoping.

11. (original) The overlay routing processor of claim 1, further comprising instructions for servicing plugin modules.

12. (original) The overlay routing processor of claim 1, further comprising instructions for placing a limit on the number of transfers between computers for a given portion of information.

13. (previously presented) The overlay routing processor of claim 12, wherein information is transferred between the computers in packets, the overlay routing processor further comprising instructions for placing a "time-to-live" value in a field in a packet.

14. (original) The overlay routing processor of claim 1, further comprising instructions for preventing the transfer of information between predetermined computers.

15. (original) The overlay routing processor of claim 14, wherein one or more computers are identified by an address, the overlay routing processor further comprising using the address to prevent the transfer of information between predetermined computers.

16. (withdrawn) A routing device in a computer network, the device comprising:
instructions for detecting a client request for content information from a client computer;
instructions that identify a routing processor for handling the client request;
instructions that obtain communication information from the routing processor; and
instructions that transmit the communication information to the client computer, wherein the communication information provides the client computer with a preferred way to communicate with the routing processor.

17. (withdrawn) The server of claim 16, wherein the instructions that identify a processor include instructions that provide a uniform resource locator to the client computer.

18. (withdrawn) The server of claim 17, wherein the instructions that identify a processor include instructions that provide an overlay address corresponding to the content information to the client computer.

19. (withdrawn) A device in a computer network, the device comprising:

instructions for detecting a client request for content information from a client computer;

instructions for identifying a processor for handling the client request;

instructions for obtaining a communication resource from the processor to be used to facilitate transfer of information between the client computer and the processor;

instructions for transmitting the communication information to the client computer, wherein the communication information provides the client computer with a preferred way to communicate with the processor.;

instructions for obtaining, from the identified processor, a communication resource to allow transfer of information between the client computer and the processor; and

instructions for transferring information about the communication resource to the client computer.

20. (withdrawn) The device of claim 19, wherein the communication resource is a port identifier.

21. (withdrawn) A method for performing overlay routing in a computer network, the computer network including multiple computers coupled to allow information transfer over the computer network, the computer network having a native routing protocol, the method comprising:

associating computers on the computer network with a given overlay group;

determining whether received information is associated with the given overlay group;

routing the received information to the computers associated with the given overlay group using the native routing protocol;

associating a native group with an overlay group; and

changing the association between an overlay group and a native group.

22. (withdrawn) A computer-readable media programmed with instructions for performing overlay routing in a computer network, the computer network including multiple

computers coupled to allow information transfer over the computer network, the computer network having a native routing protocol, comprising:

- instructions for associating computers on the network with a given overlay group;
- instructions for determining whether received information is associated with the given overlay group; and

- instructions for routing the received information to the computers associated with the given overlay group using the native routing protocol;

- wherein at least some of the routing uses an addressing strategy that carries overlay addresses in an additional overlay header and native multicast addresses are computed from the overlay addresses.

23. (withdrawn) An overlay routing processor for transferring information over a computer network, wherein the computer network has a native routing protocol, the overlay routing processor comprising:

- instructions for associating computers on the computer network with a given overlay group;

- instructions for determining whether received information is associated with the given overlay group;

- instructions for routing the received information to the computers associated with the given overlay group using the native routing protocol;

- a data table accessed by the processor for defining peer relationships between overlay processors; and

- wherein the instructions for routing include instructions for using the defined peer relationships between overlay processors to perform the routing.